I claim

1. A method for performing data transfer of a keyboard-video-mouse (KVM) switch, the KVM switch having a main processor with a plurality of input/output (I/O) ports each connecting to a corresponding computer, each of the I/O ports corresponding to a

5   transmit flag register (Tx flag) and a data register and having a data pin, the method comprising following steps:

(a) storing peripheral data in the data register corresponding to each of the I/O ports for which said peripheral data is ready for transfer;

(b) setting the Tx flag corresponding to each of the I/O ports connecting to the

10   corresponding computer ready for receiving said peripheral data and having said peripheral data ready for transfer;

(c) at each of the I/O ports corresponding to the Tx flag set, transferring a bit of said peripheral data from the data register thereof to the data pin thereof during a clock cycle; and

15   (d) repeating step (c) until reaching a predetermined number of times.

2. The method as claimed in claim 1, wherein each of the I/O ports has a clock pin, and the method further comprising:

checking the data pin and clock pin of each of the I/O ports to find out the computer ready for receiving said peripheral data.

20 3. A method for performing data transfer of a KVM switch, the KVM switch having a main processor with a plurality of I/O ports each connecting to a corresponding computer, each of the I/O ports corresponding to a receive flag register (Rx flag) and a data register and having a data pin, the method comprising following steps:

(a) setting the Rx flag corresponding to each of the I/O ports connecting to the

25   corresponding computer ready for sending control data;

(b) at each of the I/O ports corresponding to the Rx flag set, receiving a bit of said control data from the data pin thereof and storing the bit of said control

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data to the data register thereof during a clock cycle; and

(c) repeating step (b) until reaching a predetermined number of times.

4. The method as claimed in claim 3, wherein each of the I/O ports has a clock pin, and the method further comprising:

checking the data pin and clock pin of each of the I/O ports to find out the computer ready for sending said control data.

5. A method for performing data transfer of a KVM switch, the KVM switch having a main processor with a plurality of input/output (I/O) ports each connecting to a corresponding computer, each of the I/O ports corresponding to a Tx flag, a Rx flag and a data register and having a data pin, the method comprising following steps:

(a) storing peripheral data in the data register corresponding to each of the I/O ports for which said peripheral data is ready for transfer;

(b) setting the Tx flag corresponding to each of the I/O ports connecting to the corresponding computer ready for receiving said peripheral data and having said peripheral data ready for transfer;

(c) setting the Rx flag corresponding to each of the I/O ports connecting to the corresponding computer ready for sending control data;

(d) at each of the I/O ports corresponding to the Tx flag set, transferring a bit of said peripheral data from the data register thereof to the data pin thereof during a clock cycle;

(e) at each of the I/O ports corresponding to the Rx flag set, receiving a bit of said control data from the data pin thereof and storing the bit of said control data to the data register thereof during the clock cycle; and

(f) repeating step (d) and (e) until reaching a predetermined number of times.

6. The method as claimed in claim 5, wherein each of the I/O ports has a clock pin, and the method further comprising:

checking the data pin and clock pin of each of the I/O ports to find out the

computer ready for receiving said peripheral data.

7. The method as claimed in claim 5, wherein each of the I/O ports has a clock pin, and the method further comprising:

checking the data pin and clock pin of each of the I/O ports to find out the

5   computer ready for sending said control data.